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JANUARY 1963

Soil Conservation

SOIL CONSERVATION SERVICE • U. S. DEPARTMENT OF AGRICULTURE

Soil Conservation
25 Years Ago

"It's Nature's way in Minnesota. It's bluegrass sod, and grassed waterways, and willow cuttings.

"It's legumes, and small grains—in strips.

"It's blotters instead of shingles . . .

"Spring Valley, Winona, Caledonia, Faribault. Four representative watersheds: Deer and Bear Creek's Gilmore Creek, Beaver Creek, Prairie Creek.

"Deep fall painting the Minnescta valleys in the hues favored by butternut, walnut, maple, sumac, ivy, and oak.

"Swift, cold streams where the sportive trout wait on a lightening of silt load.

"Lights blazoning from the windows of rural homes where farmers again tally their books with black ink instead of red.

"Cows milked, horses bedded down, barns locked.

"Soils made secure, not only for tonight but for tomorrow."

COVER PICTURE—Women in conservation sometimes take to the fields, as witnessed by these two putting up hay on Wayne Luben's conservation-improved ranch in Rio Blanco County, Colo. (See SOIL CONSERVATION, October 1961.)

—Photo by B. C. McLean.

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Soil Conservation

ORVILLE L. FREEMAN
Secretary of Agriculture

DONALD A. WILLIAMS
Administrator, Soil Conservation Service

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FRANK B. HARPER, Editor

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NACD Auxiliary Head Lauds Conservation Work of Women

By Mrs. Charles Gotthard

IN 1937 I came as a bride to Briar View Farms, our home in Wexford County, Mich. The love for the land which my husband and I shared created a desire within us to make the productivity of this land greater, yet improve its quality at the same time.

It is a great satisfaction to me to observe from where I now live nearby that our son, Stuart, and his wife, Betty, and their four children today are carrying on the conservation farming practices "Charles and Mary" used in bringing our farm to its present high level of productivity. I sold the farm to them last April, a year after my husband died.

Although we had no soil conservation district in those days, we did consult with the Extension Service people and asked many questions of resource people at Michigan State University as to the best methods of farming and the best types of grass and grains, fertilizers, and so on. We attended Extension meetings and adult farm classes at the local school, always with an eye and ear to better ways of treating our land.

In 1945, when a group of leading farmers of the county were called together to organize the Wexford Soil Conservation District my husband was elected a director, a post he held until his death.

We became district cooperators and followed our farm plan, developed with the help of the Soil Conservation Service, as nearly as possible. Because our land was level and the soil of good quality sandy loan, people often asked why we needed a conservation plan. We were quick to point out the advantages of the half-mile long strips, rather than the crazy-quilt pattern we had used; our maximum tillage program which allowed the moisture to stay where it fell; our improved pastures.

We changed from general farming with our acreage in various grains, pasture, potatoes, and hay, to a program of grassland farming which included wheat, oats, and alfalfa. It was less work and more profitable. Our crops were utilized by our dairy herd, which provided our income. Windbreaks and multiflora rose aided in retaining the moisture on the land. The woodlot provided fuel and lumber.

Through the years, my husband's conservation work included his appointment to the State Soil Conservation Committee, his election to the presidency of the State Association of Soil Conservation Districts, and his appointment as a member of the National Association of Soil and Water Conservation Districts Council. In 1956, I was hired by the Wexford district as district aid, a job which I still have. In 1960, I was elected president of the Michigan Conservation Districts Auxiliary and served two terms. In 1961, I was elected president of the National Association Auxiliary, and am now serving my second term.

Charles and I farmed together, and we were fortunate indeed to have been in a position where we could assist, in some measure, in forwarding the work of soil and water conservation. It was our hope and prayer that across the width and breadth of this great country the land would one day be forever living and green. It was our hope, and is still my hope, that every man, woman, and child will come to know and understand conservation in its basic phases—soil, water, wildlife, and forests. Indeed, there is need to do more than know and understand it—there is a need to *live* it.

Mrs. Charles Gotthard.

Far too often I have heard people ask: "What does conservation do?" Or they say: "I didn't know *women* were interested." It seems to me their question should be: "What can *we* do for conservation?" And I ask: "Why shouldn't women be interested? Doesn't soil and water conservation contribute greatly to their economic advantage? Doesn't it improve their environment? Doesn't it beau-

Note.—The author is president of the Ladies Auxiliary of the National Association of Soil and Water Conservation Districts, Traverse City, Mich.

tify their surroundings?" Of course women must be interested in conservation—not only interested, but actively so!

During the time I have served as national president, I have traveled America from north to south and east to west. I can truly say we live in "America The Beautiful." At the same time, we have problems, many quite universal as they apply to soil and water conservation. There is a need for better management and for remedies that will help meet deficiencies. There are arid regions with the need for a more adequate water supply, and wetlands needing better drainage and better protection from flooding. I have seen fertile lands washing away and poor lands producing no income, because of improper use. I have seen lands overgrazed and forest lands denuded unwisely of their timber.

Wexford SCD women on conservation tour.

Basically, however, our needs are similar. Most necessary is the will on the part of the people themselves to do more about soil and water conservation and to do it better. Once the spirit of conservation catches on, there is need for adequate financing and technical help to assist the local people in moving forward toward their goals.

It has been stated before that the idea of conservation began as a vision, one which we, the women, wanted to help in becoming a reality. I'm proud of the reports which come from the State auxiliaries.

A windbreak traps snow on Briar View Farms.

These reports tell me that across the country there are increasing hundreds of women who are hard-working conservationists. They are informing themselves on the problems, programs, and opportunities of their districts, and their State and national associations. They are offering to serve in any way possible. In their homes, they are teaching their children conservation concepts; and on the farms and ranches they are encouraging their husbands in broader programs of conservation activity.

They are interpreting conservation and farm life to other women who are homemakers with the same everyday problems of feeding and clothing their families, and who are desirous of a higher standard of living and better recreation.

Many are assisting with the annual observance of Soil Stewardship Week. They are studying school curricula with an eye to conservation teaching. They help plan, and participate in, soil and water conservation projects of farm

women's organizations, garden clubs, Extension groups, and other organizations. They are 4-H Conservation Club leaders, and work with the Future Farmers of America (of which I am a very proud honorary member), and with the Boy and Girl Scouts. I believe one of our most important efforts should be to do those things which will bring about the education of our children in conservation of our natural resources.

At the same time, we must not forget the conservation education of the adults, both men and women, both rural and urban. My work as a district aid has given me the golden opportunity of working with all of these groups, plus radio, TV, and newspapers. It is our job to have them understand that our land and water are basic to the support of individuals, their families, and their communities, their schools, churches, and other institutions.

It is our job to tell the "Conservation Story." It is our desire to work together, to help translate the bright vision of conservation on the land into fruitful reality—now and for years to come.

Wives Help Make Irrigation Studies

By Robert A. Sidner

QUENTIN Hittle, Sr. of Davidsonville and Charles F. Stach of Odenton and their wives are helping tobacco farmers in the Anne Arundel Soil Conservation District of Maryland to obtain needed irrigation information.

Two plots of tobacco, one on each farm, represent widely different kinds of soil, each of which has been carefully tested to find its waterholding capacity and what part of this water is available for plant use. These field trials are conducted by using a procedure similar to the running balance carried in a checking account. The deposits are water from rainfall and irrigation. The withdrawals are from the sun, wind, and plant use.

Mrs. Stach checking in the field.

Mrs. Hittle and Mrs. Stach help their husbands by making daily readings to determine the average temperature, hours of sunlight, and rainfall, if any. They also record the amounts of water applied when the crop is irrigated. Each day, the balance is adjusted to show the deposits or withdrawals. Irrigation water is applied when the balance reaches a figure determined to coincide with wilting of the tobacco, to bring the balance back to field capacity.

These trial results are carried on throughout the growing season, and are correlated with comparable figures obtained by farmers in other counties in Maryland and elsewhere in the northeastern United States. Use of irrigation to intensify crop production has gained wide acceptance in recent years. Field trials like these provide a guide for future proper conservation water management.

Mrs. Hittle recording information she has gathered.

Note:—The author is work unit conservationist, Soil Conservation Service, Annapolis, Md.

"Women in Conservation Are All Alike—They All Are Doing Their Part"

By Ruth Williams

(Note:—This "women in conservation" issue of SOIL CONSERVATION would not be complete without this personal observation by the wife of SCS Administrator Donald A. Williams, one of the many wives who have been through the soil and water conservation ranks with their husbands. A South Dakota farm girl, she has since 1935 shared with him, and with the wives of the farmers and ranchers with whom he worked, the fight against soil erosion and water waste—lived and "preached" conservation from coast to coast.—Ed.)

IT was the spring of 1932 and I was on my way from Aberdeen to Clark, S. Dak., to see my prospective husband. It was spring and like James Russell Lowell's poem:

"Now is the high tide of the year . . . And whatever of life hath ebbed away . . . Comes flooding back with a ripply cheer . . . Into every bare inlet and creek and bay . . . And . . . No matter how barren the past may have been . . . 'Tis enough for us now that the leaves are green."

But the poem we memorized back in the 5th grade just didn't make sense this spring morning. Another "black blizzard" had just roamed through the Plains States and had again left it a sea of desolation. There were no songs of the birds to herald the morning, for birds must have water and cover. There was neither—only powdery dust.

The road passed through miles of once fertile fields and pasture—now a vast nothingness—broken down fences half buried in dust, trees trying desperately to put forth a few leaves—that is if they still survived. We were stopped at the railroad crossing as a long train of cattle cars filled with bellowing, bawling, half-starved animals on their way to Omaha or Sioux City crawled past. They should have been in green pasture with new calves.

Ruth Williams.

Along the road were farm houses, once painted white with organdy curtains and potted plants in the window. Now they are like the landscape about them—grey and forlorn, and some abandoned. The man at the next filling station, once a farmer, muttered: "I just can't take it any more." Even "hope" for many had become a meaningless word.

The "Dust Bowl" was only one of Nature's rebellions against man's misuse of her resources. For example, I remembered the little city of Vanport, Oreg., destroyed in minutes by a flood on the mighty Columbia River, made mightier by uncontrolled water runoff from melting snow on the watersheds. Then there was a lovely little lake back from the coast a mile or so—where Don actually caught fish. A clear-cut logging outfit had raped the bordering mountains, leaving the slashings. Fire followed, and then flood silt drained into the lake, and it no longer had an abundance of fish. And who can forget the Tillamook Burn in the Cascade Mountains in Oregon. Thousands of Douglas fir trees lay waste—a scene as desolate as the Dust Bowl itself. And how about the strip-mining spoils and debris in the Appalachian Mountain country at the other end of our great country?

These are all dreary pictures we would like to forget, as we would like to forget the week of October 19, 1962, with its possibility of laying waste our Nation. But we dare not forget! It often takes disaster or near catastrophe to start a movement for a better way of life. So it was that out of disaster the Nation's modern soil and water conservation program as we know it today was born 30 years ago.

Men everywhere joined in the movement and with them, as the coworkers, the moral support, the "power behind the throne," the "no dollar a year gal"—the *women!* I have yet to meet a wife of a conservationist or of a conservation farmer or rancher who was not a conservationist in her own right. She may not build stock ponds, terrace the hills, or make contour furrows; but I'm sure she's approved his conservation program, pushed it, preached it, and cut the budget so it could be done.

There is no greater pleasure than to go with Don to conservation meetings. It doesn't matter which State you go to, the women in conservation are all alike. They all are dedicated and are doing their part

Vanport, Oreg. (between Vancouver, Wash., and Portland, Oreg.) grew up in early 1940's to serve World War II industry workers and was destroyed by this flood in 1948.

in conservation.

We have a Ladies Auxiliary of the National Association of Soil and Water Conservation Districts. It is an effective education arm of the Association; and there are growing numbers of State association auxiliaries, and even some local district auxiliaries. You will find the conservation women also have left their mark on the public school course of study, on the garden clubs, General Federation of Women's Clubs, League of Women Voters, 4-H Clubs, Girl Scouts, and Camp Fire Girls. You name it and, if by chance they missed, well, just give them time!

I knew a little Camp Fire Girl several years ago who could classify land like an expert. And I've heard more than one teenager proudly express the wish in typical teenage fashion that "Just once they'd like something dished out, other than conservation, at the evening meal." So you see this conservation movement is not "for men only," but a family affair.

From Swimming Champion To Conservation Farmer

By Robert F. Tegner

WHEN Florence Chambers was a girl of nine adversity put her on the road to becoming a champion swimmer. A quarter of a century later, adversity put her on the road to conservation farming and made her one of its staunchest champions.

Water has been as important in the latter phase of the life of this San Diego and Escondido, Calif., businesswoman as it was in her earlier stardom. As a swimmer, she overcame a back injury and went on to star in the 1924 Paris, France, Olympics after numerous conquests in the United States. As a conservationist, she served for 10 years as secretary to the board of supervisors of the Pomerado Soil Conservation District. A technicality of legal residence had prevented her being a supervisor, although she was elected to that position.

A fall on a streetcar in 1917 injured Miss Chambers' spine. Doctors had just about convinced her parents to put the girl in a cast, when one suggested what was then the little-known method of water therapy.

"I spent hours in the water," Miss Chambers recalls, "and I became pretty good at swimming."

Miss Chambers won 157 trophies for open water swimming and more than 300 medals for indoor competition. She was only 16 when she made the Olympic team, on which

Miss Chambers at 1924 Olympic Games in Paris.

Note:—The author is field information specialist, Soil Conservation Service, Berkeley, Calif.

she placed third in the backstroke. Later, Miss Chambers became a coach of champions, including Florence Chadwick of San Diego, who swam the English channel both ways.

Miss Chambers' parents were lured to California in 1886 by reports of the wonderful weather and the opportunities. Her father, who had been reviewing plays for a New York newspaper, joined the staff of a Methodist college in San Diego as professor of Greek and Latin.

Over the years, the Chambers acquired property including a 1,400-acre ranch in Poway Valley near Escondido. The ranch was leased to a cattle firm for years, but inheritance taxes threatened to wipe out the estate left when her parents died. While lawyers battled in the courts to save it, Florence Chambers went to work operating a dairy. She came out on top in both struggles. For the first time in her life, she also began operating farm machinery. This was in 1943, midway in the second World War when manpower was scarce.

One of the first bits of advice she heard in the farming community was: "If you don't know much about farming, go see the Soil Conservation Service and find out what you need to do with the land." Obviously, her land used for grazing needed some changes for dairying.

Miss Chambers became a cooperator in the Pomerado district (recently consolidated with another to form the Penasquitos SCD), and soil and water conservation acquired a new champion—a fighting champion. It wasn't long before she was working with supervisors as board secretary.

What was needed to build up this farm was the same thing she needed as a girl—"water therapy." Wells were not providing enough water; so with technical help of the SCS, Miss Chambers had a reservoir built to store runoff rainwater. She later built two more, one fed by a spring. More recently, she gave up some of her Poway Valley land to a sewage treatment plant, receiving rights to the water from the plant to store behind another dam.

Today's Florence Chambers by reservoir impounding water released from sewage treatment plant on Poway Valley farm.

Early in her farming career, Miss Chambers set out to buy a herd from a local dairyman going out of business. She wound up buying the whole farm—the 1,300-acre Cloverdale Farm. She has been less fortunate thus far in her search for water for this farm; but she has worked hard to develop it along good conservation lines, including installation of a double-dam barnyard drainage project.

To supply hay and grain for her herd, Miss Chambers developed about 100 acres of cropland on the Poway Valley farm and about 300 acres on the Cloverdale Farm, using sprinkler irrigation. Her other conservation activities have included rangeland grass experiments and a big brush-clearing project to reduce fire hazard and increase range feed. Today, Miss Chambers is leasing the dairy operation and concentrating on raising replacement heifers for dairy herds.

Meanwhile, about 400 acres of her Cloverdale Farm was taken over by San Diego for a reservoir that never developed, and some of her Poway Valley farm has been sold to friends and to the sewage district. But another force has been creeping around Florence Chambers' Poway farm in recent years — spreading suburbia. Although she has stoutly stuck to her farm, she recognizes that "taxes are so high, I can't afford to keep it in agriculture."

With friends and advisers, she has formed a corporation to take over Poway. Recreation looms high in the plans. Already off the drawing board are plans for a golf course. Other recreational developments may include trout fishing facilities and pasturage for riding horses. Subdivision also is included in the plans.

But Florence Chambers is still one of conservation's strongest boosters.

"Soil and water conservation is the salvation of agriculture," she will tell you. "We just couldn't do without it these days."

New York Woman Is Conservation Leader

By Homer E. Stennett

Mabel H. James.

A DEVOTED advocate of the conservation of the soil and other natural resources is Miss Mabel H. James of Holland, N. Y., who has multiplied her influence in conservation by teaching others to become conservationists.

Miss James says that to learn about conservation you must get out of doors. It was hiking with children of the James' household and neighborhood youngsters that started her on her own career in conservation. As a result, she developed into a naturalist well acquainted with her environment, and became proficient enough to become naturalist for the Garden Center Institute of Buffalo.

It occurred to her that some adults also would like to be taken on guided hikes. The still active Buffalo Hiking Club had its beginning in Sunday hikes Miss James started after she graduated from Holyoke College in 1909.

Miss James has been Research Associate in Conservation for the Buffalo Museum of Science since 1941. Her interest in conservation was reawakened in the early 1930's when she read articles by Dr. Walter C. Lowdermilk, then of the Soil Conservation Service, and Writer-conservationist Russell Lord. This new knowledge she taught to her hikers, school groups, garden clubs, and others.

She had long noticed that many groups were interested in conservation, but that they were doing little about it. So she began the work which, she thinks, has been the most significant. She helped to organize the Conservation Forum of New York State in 1939. She was corresponding secretary in the early years and now is chairman.

The Forum is a federation of all kinds of groups, such as garden clubs, conservation clubs, and chapters of the Izaak Walton League. As many as 60 groups have supported the Forum, and its printed reports are sent to more than 250 members. Several other chapters have been organized elsewhere in New York. The aim of those belonging to the Forum is to educate themselves about conservation matters and to influence others. Through the years, special effort has been made to enlighten legislators in their consideration of conservation legislation.

The Forum's first and continuing interest was the conservation of soil and water. Through the years, however, the people in the

A "Conservation Caravan" visiting Great Brook watershed in Chenango County, N. Y.

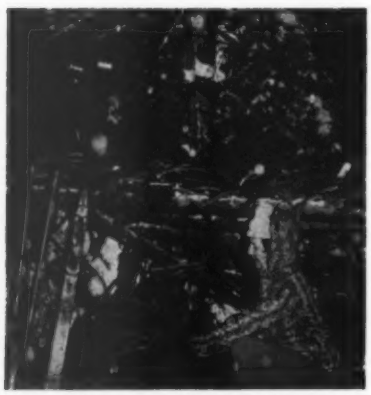
Note:—The author is area conservationist, Soil Conservation Service, Wellsville, N. Y.

Forum have studied and voiced their opinions about related subjects such as clean streams, wildlife, public parks, forests, and the New York State Forest Preserve. At the moment, the Forum is concentrating on the protection of the golden and bald eagles, which are threatened with extinction. Today, Miss James finds, the general public has a greater knowledge about conservation, for which she says the Forum can take its share of credit.

Each year for 14 years Miss James has conducted a weeklong conservation caravan of 30 or so people through the eastern United States by bus. She always plans to visit several soil conservation farms and watershed projects on the tour.

Through the Buffalo Museum of Science she also conducts a yearly poster contest in conservation. She writes much and lectures often. She has helped with campaigns to raise funds for the purchase of land and water areas that have special value to conservation. She is a trustee of the New York Chapter of Nature Conservancy, has been a trustee of the American Nature Study Society, and is a member of the Audubon Society, the Community Council, and the Holland Planning Board.

She is proud that in 1962 the Mabel H. James section of the Conservation Trail was dedicated. This hiking trail will extend from Pennsylvania to Lake Ontario.



The author preparing her bivouac in a snowbank.

First Woman

Braves Snow Survey School

By Rachel LeVasseur

IN the irrigated valleys of Wyoming most of the water comes down from the high mountains where it has been stored as snow through the winter. Farmers and ranchers use the water according to their "rights." This means that in years of subnormal yields, water users fare according to their established claims to water available.

We who serve as hydrographer-commissioners in Wyoming have the job of administering water supplies according to these priorities. We rely heavily on the information we get from snow surveys, reports that indicate how much water we can expect from streamflow in the irrigation season.

I have known about snow surveying for many years. The program started in Wyoming in the 1930's when my husband, Ernest, and I still were engineering students at the University of Wyoming. In those days, he, accompanied by Paul Petzoldt, renowned mountain climber, or some equally sturdy volunteer, traveled by car as far as possible and then finished the trip on skis to the snow stake at the foot of Medicine Bow peak. I figured the field notes when they returned. The U.S. Forest Service rangers also assisted as the program began to develop, prefacing the present day surveys under Soil Conservation Service guidance.

About 6 years ago, Ernie and I took to the air to check snow depths on inaccessible snow markers. He piloted. I made notes.

Somewhere along the line I learned the art of oversnow travel and snow sampling, which were to become, eventually, such a valued part of my experience and my work as river basin operator.

However, the advanced theories of snow surveying, the hazards that are always near, and the newer techniques that are coming into use—these I had not yet encountered. Therefore, it was with sincere interest that I enrolled, with approval of State Engineer Earl Lloyd, in the sixth annual Westwide Snow Survey Training School at Winter Park, Colo., in 1962.

I had expected my application would arch some eyebrows—and it did. No woman had ever before taken the training. I confess I did not have a clear idea of just what the curriculum would involve, but my enrollment was received by the sponsoring Soil Conservation Service with magnanimity.

There were 97 trainees from the 11 Western States and British Columbia in which snow surveys are made monthly each winter. Many of them came from cooperating agencies—the Forest Service, U. S. Geological Survey, Agricultural Research Service, Park Service, Bureau of Reclamation, and the Dominion Water Rights Department.

The next 5 days were as busy and action-packed as any I have ever spent. Lectures and practice periods were correlated with outdoor training. We studied the theory and factors that are involved in runoff water forecasting, the principles of planning and water management, winter safety and first aid, snow sampling and

Note:—The author is hydrographer-commissioner for the Laramie River Basin in Laramie, Wyo., and member of State Engineer's staff.

Instructor making snow survey test for one group of trainees.

note keeping, and research in the snow survey field.

Out of doors we practiced on skis and snowshoes, making a 3-mile cross-country trek on skis. We sampled the snowpack and figured water equivalents and soil moisture. We practiced the art of winter health and survival.

One thing required of all trainees was an overnight bivouac near the 12,000-foot Berthoud Pass summit. With the temperature at night sinking to minus 20°, I am sure the school directors expected me to plead an excuse. I didn't. But it was an unforgettable experience.

Finding a likely depression in a snowbank, you insulate it with evergreen boughs and then, when you crawl into your down-filled sleeping bag, you carefully take your ski boots inside the bag with you. It is vastly important to keep boots and clothing dry. Keep dry and you'll keep warm. The chances are you will sleep snugly. I did.

Several things stood out as I progressed through the course. Perhaps the most obvious was the importance of reliable measurements and information in snow surveying. Only the snow surveyor—and no one else—goes out and gets these facts.

Also, I detected an accent on the urgent need for more research in this field. High elevation snow laboratories and many more precipitation stations are needed to supplement the current field data. Snow, alone, does not tell all the story. Remarkable work already has been done, including the association of climatological records with water yields. High altitude photography, such as Tiros, beggar the imagination of what the future can unleash for the researcher.

I learned how important it is to recognize hazards in snow surveying and to avoid them. Safety in snow surveying comes from learning how to live with hazardous surroundings.

The school was a rigorous but thoroughly exciting and inspiring experience. Do it again? Of course I would. I expect to. Whenever I figure water deliveries now, there will be a new concept in the back of my mind of the painstaking work that goes into the forecast information, and of the training and principles that underlie snow surveying wherever it is done.

The author has some fine points of snow surveying explained to her by fellow members of the training group, James J. Steele of Idaho (l.) and Robert L. Werner of Colorado.

Clubwomen's Conservation Motto: "A

By Mrs. Lewis

Mrs. M. Lewis Hall.

THE General Federation of Women's Clubs with its history of concern for both human and natural resources is well fitted for the role of bringing about public understanding of community and national needs.

There are Federation resolutions covering all phases of conservation. Thus we see that our organization has not only been alert to the changing times, but vocal as well. We must do more in conservation, however, than just sit back and enjoy the honor of being a member of such a farsighted organization. That is why the Federation's Conservation Department has the following goals as guides to our 1962-64 efforts in this vital field:

(1) Informed action based on the knowledge that our way of life and our very survival depend on wise use of earth, air, water, trees, and wildlife.

(2) To know and assist in solving the conservation problems of our home States and regions.

We have conquered our continent and exploited our resources. Being "use minded" and practical people, we have proceeded to use resources as if the population of the United States were small and the natural resources were never-ending riches. We do not see Nature as the Indian might—as one continuing circle in which man and sky and earth and water are working, cooperating parts. Yet, there is a growing interest in ecology—the study of the interrelationship between organisms and their environment.

With so much being said and written about who will reach the moon first, space is uppermost in most people's minds these days. We clubwomen must remember—and use in our club programs—the fact that before we go up, we must go down in the earth for raw materials. For those of us who remain earthbound, we too have a problem of space. The ground under our feet—the most important space in the world—is disappearing at an alarming rate. Of even more concern than outer space is the space that is left here and the use man makes of it.

It is urgent that we understand the pressures which are changing our conservation environment, and in that way, that we fully comprehend our conservation responsibilities. The pressures are: first, population growth—the number of metropolitan areas is increasing, and the suburban area outside the central city is the main growth area; and second, the decrease or pollution of resources. Since many demands are made upon most resources, this is an area where we must work together.

Water, for example, means life

Contour stripcropping is one of the conservation measures that help keep this farm near Pennington in New Jersey's Freehold SCD productive and prosperous.

Note:—The author is chairman of the Conservation Department, General Federation of Women's Clubs, Washington, D. C.

"Do More Than Just Sit Back"

By Mrs. Lewis Hall

—and recreation—and sometimes pollution. Again, the wise use of water resources needs the participation of many concerned people: the farmer, the fisherman, the boatman, the industrialist, the homeowner, the swimmer. The water problem is twofold: uneven distribution and pollution.

With careful management, resources can be used by people with a variety of outdoor interests. Multiple use is a familiar term, especially in connection with our forest resources. Both the U. S. Government, through its national forest program, and private tree farmers are encouraging the use of forests for timber, recreation, forage, and wildlife and water.

Grassland areas have received careless treatment in the past, but modern conservation farming methods are restoring them. In the rich Midwestern land, impatient settlers plowed up the grasses which helped hold the soil together. It required not many years before the fine topsoil was blowing off with the wind and washing away with the rain. Stripcropping, terracing, and contour rows are used together or singly to hold the water long enough to seep in the soil. Much of the grasslands area is grazing land where careless overgrazing—again the error of not leaving enough for tomorrow—can lay the land bare for generations. The need for balance between the "carrying capacity" of a piece of land and the human needs for livestock products is demonstrated.

Enjoyment of our resources through recreation is another use. In the field of outdoor recreation there are significant new dimensions; a growing population, more leisure time and movement of people to the cities have combined to bring about problems and a challenge. Man likewise is taking an active part in the life cycles of the other living creatures in the conservation picture; the business of wildlife management includes changing the natural environment to help produce a sustained annual crop of wild game for food and recreational purposes.

Livestock water, recreational facilities, and gully control are among dividends paid by this 1-acre pond on L. T. Haden farm in Callaway County, Mo. Hadens are discussing conservation farm plans with Cleo H. Statton of SCS (l.).

As Federation President Mrs. Dexter Otis Arnold pointed out in her installation message, "Assignment for the Sixties," last June:

"A drop of water, a small clod of earth, our oil, gas, iron, fissionable fuels, animals, mountains, forests, lakes—Unity in Diversity—the glories of America bound together under the name of conservation. There is a need for a deep realization of our veritable survival in that word conservation. Based on the premises that conservation is the wise use of renewable and nonrenewable natural resources, conservation becomes not just a term, but a way of life. We will strive for multiple use in resource development with private enterprise and Government assistance in an effort for the greatest good for the greatest number for the longest possible time . . .

"Our natural resources are interdependent and interrelated, and they need to be considered and understood in this perspective. By studying the area conservation problems, experiencing special Conservation Days in every State and becoming acquainted with a telescoped conservation program, an interest in comparative concerns may be more fully developed and better understood for a more forceful and effective program. Conservation concerns our economy, our nutrition, our recreation, and our very way of life."

Puerto Rico's Mrs. Torres Preaches—Practices Conservation

By J. F. Marrero

IN a land where for generations woman's place was in the home Mrs. Rosa Torres emphasizes the increasing role of the women of Puerto Rico in every activity formerly the province of the man.

Mrs. Torres owns and operates two farms, the family farm of 41 acres where she was born, and another of 14 acres. Most of the 55 acres is planted to sugarcane, and under her supervision all of the soil and water conservation practices required have been established. They include contour planting, crop residue management, establishment of water-disposal areas, and farm roads built on the approximate contour. About 5 acres is in forage grass.

Mrs. Torres is a soil conservation leader in her community in Barrio Santana, Sabana Grande. She is also a member of the local Extension Service Advisory Planning Committee and takes an active part in preaching the gospel of soil and water conservation throughout the community. "Preaching" is the correct expression, because she has tremendous faith in all matters concerning soil and water conservation.

Rendering community services comes naturally to Mrs. Torres. Upon her graduation from Ponce High School in 1920, she became a rural school teacher. She quit to attend Columbia University in New York City and received a B. A. degree in 1947. Upon graduation, she returned to Puerto Rico and was appointed instructor and professor of history at Interamerican University at San German. She taught there until 1959, when she retired to devote all her time to farming. During her 12-year teaching career, she had spent all her spare time on the farm.

Mrs. Torres spraying chemical weedkiller on sugarcane field border and roadbank.

The conservation plan for her sugarcane farm is the subject of a field discussion by Mrs. Torres with the author (l.) and SCS Work Unit Conservationist Alfredo Ramirez.

Mrs. Torres supervises all farm operations and personally performs many of the operations of a sugarcane farm such as planting, fertilizing, harvesting, and operating a power winch for loading cane onto trucks for transportation to the Guanica sugar mill.

The Suroeste Soil Conservation District in which Mrs. Torres' farm is situated is in the southwestern part of Puerto Rico, in the semiarid region of the Island. When the author and a Soil Conservation Service technician working with the district visited the farm, Mrs. Torres, wearing blue work slacks and shirt with a handkerchief over

Note:—The author is soil conservationist, Soil Conservation Service, Santurce, Puerto Rico.

her hair to protect it from the hot sun, was using a portable sprayer with a chemical weedkiller on the sugarcane field borders.

She plans eventually to change her farming enterprise from sugarcane to grassland for beef production, because continuous cultivation of sugarcane on her limited acreage places too great a strain on the land. In addition, obtaining sufficient labor for cane harvesting is becoming more difficult, because of the seasonal migration of farm laborers to the eastern United States.

Mrs. Torres' enthusiasm for soil and water conservation, her interest in civic activities, and her energy for hard farmwork, have been a revelation to the residents in Barrio Santana. All her neighbors respect her as a leader who teaches them how to improve community affairs, not only by talking about it but by actually doing the work herself.

Whether supervising the operations of her farms or addressing a civic group or farmers organization, Mrs. Torres is completely at ease. She is in demand as a public speaker. But more than anything else, she is an outstanding example of the role and progress Puerto Rican women have achieved in the everyday struggle for self-improvement, leadership, and service to the people in Puerto Rico.

Homemaking—Natural Resources Are Closely Related

By Mrs. Richard S. Thompson

THE conservation of life is a natural instinct in women and all life depends on the conservation of natural resources.

It is not difficult for me to understand why women should be active in conservation. I have been active for several years. It has become a way of life in our family. My husband and I are both active in conservation on our farm. Also, we serve in conservation work as officers in State and national organizations of soil conservation districts. We are so enthusiastic about conservation of soil, water, woodlands, and wildlife that we can't really understand why everybody is not actively engaged in some kind of conservation effort.

It seems to me that women everywhere should be aroused about conservation, since they are the homemakers of our country and natural resources are so closely related to the home and the family. Food, shelter, water, and clothing are all products of natural resources. This is true for all of us, whether we live on a farm in the Lower East Red River Soil Conservation District, as I do, or in a city like Baton Rouge or New Orleans.

Conservation and wise use of soil has brought us a standard of living unsurpassed in history. Our food abundance is the envy of the world. Conservation farmers have played a vital role in providing the homemaker with this abundance of high quality food at reasonable prices. Also, they have freed a large proportion of our population from producing their own food so they can work in industry, professions, or other endeavors. In some countries, a large percentage of the total population is engaged in agricultural production. In the United States, one farmer produces enough for himself and 26 others.

The author and daughters Barbara (L) and Ellen study Women's Clubs conservation kit (p. 136).

You know about water. It's something you drink, cook with, or bathe in. Water also can be fun for swimming, boating, fishing. But do you realize that our farms require great quantities of water to produce food, fibers, and the raw materials which agriculture provides for industry?

The tap in your home, the water main to your factory, the fire hydrant on the corner, your favorite farm pond, and irrigation pipes and canals all carry water that has flowed across the land of a watershed or seeped deep into natural underground storage reservoirs. Farm and city people alike, therefore, should look beyond the water cooler to the watershed; for we all are involved in the use, development, management, and conserva-

Note:—The author is area vice-president of the Ladies Auxiliary of the National Association of Soil and Water Conservation Districts for the Gulf States, Colfax, La.

The kit of "Soil and Water Conservation Program Ideas for Women's Clubs" displayed by Joe Anne Blanchard of Louisiana State University.

tion of watersheds.

Fortunately, progress is being made in solving the problems of too much and too little water in Louisiana through the watershed protection and flood prevention work of the Soil Conservation Service in cooperation with soil conservation districts and various community interests. This is a local program with Federal help, and that is good. Water problems are local, but they are of equal concern to farm and city people.

Rapid progress also is being made in increasing production of usable timber products. Woodland owners in Louisiana have planted more than 1,000,000 acres to pine and desirable species of hardwood. These trees also provide erosion control and watershed protection. Soil conservation districts have been extremely active in helping farmers plant pines and apply woodland and other conservation practices. Because most of our wildlife crop is grown and harvested on land used mainly for cultivated crops, livestock, or woodproducts, farmers and ranchers likewise are the key to abundant wildlife and fishing.

A kit of "Soil and Water Conservation Program Ideas for Women's Clubs," prepared by the Soil Conservation Service, is being well received by women in Louisiana. This kit has been provided to officers and other key leaders in the Louisiana Federation of Garden Clubs, Louisiana Federation of Women's Clubs, Louisiana Federation of Business and Professional Women's Clubs, Louisiana League of Women Voters, and to numerous individuals.

About 200 copies were made available to officers and key members of the Louisiana Federation of Garden Clubs at their annual meeting last August. Mrs. George Beall of Alexandria, conservation chairman, challenged them to have at least 400 programs on conservation at garden clubs in the State in 1963. Conservation objectives listed by Mrs. Beall are: (1) Get more conservation taught in schools; (2) emphasize water conservation, management, development, and wise use; (3) cooperate in observance of Soil Stewardship Week each year; (4) know about soil conservation districts and cooperate with their supervisors; and (5) protect rare native plants on the garden club list.

The kit contains information about these topics: The Club Woman and Conservation, Women in Conservation, Appropriate Conservation Objectives for Women's Clubs, What Women in Clubs Can Do to Help Promote Soil Conservation, Suggested Program Topics, Shall Louisiana Be the Less?, and Keep Louisiana Green. It also contains several prepared talks and charts to illustrate these topics, and other program ideas and aids.

"Natural resources are gifts from God, but it is up to us to use them wisely," Mrs. Samuel Levy, chairman of the Conservation Department of the Louisiana Federation of Women's Clubs, Natchitoches, aptly says. "Trained technicians in Louisiana are teaching us the wise use of soil, water, forests, and wildlife. To be well informed on the status of these resources is the first step in good conservation. Our greatest concern is with soil and water. But, we must keep in mind the interdependence and interrelationship of all renewable resources. If the clubwomen of Louisiana would work together, we could have a 'lovelier Louisiana,' and we could make conservation of natural resources a part of everyone's life."

◆

The Perry County, Ark., SCD has placed a conservation bookshelf in each of the county's 17 schools. The National Association suggests this as a project for the District Ladies Auxiliary, "where the men haven't the time or inclination to deal with this opportunity."

SCD Director's Wife

Is Conservation Salesman

By Charles Slaton

FIVE years have gone by since Chairman Rudy Ludwig of the Pike County Soil Conservation District asked his wife to take a few notes at a district meeting. Since then Sophie has traveled thousands of miles, attended scores of conservation meetings, and kept the books for the district.

To many soil conservation district officials in Pennsylvania,

The Ludwigs—husband and wife conservation team.

Sophie Ludwig is an old acquaintance. She hasn't missed many Executive Council meetings, and you can always count on seeing her at the Annual Conference of the Pennsylvania Association of Soil Conservation District Directors. But it is in Pike County where Sophie is best known for her work in conservation.

In addition to being secretary and treasurer for the Pike County district, Sophie has developed a productive information program. The district's quarterly newsletter, which she is a prime mover in preparing, is credited by the directors and assisting Soil Conservation Service personnel with having prompted a number of farmers to become district cooperators.

They also consider her interest in watershed protection and flood prevention work a great help. The early Green Dreher watershed meetings she and Rudy held helped pave the way for getting some of the land rights, and social visits they have made into the watershed also are paying dividends. A movie Sophie is developing, which will document the watershed work in the county, will be valuable in future watershed work in northeastern Pennsylvania.

Soil Stewardship Week is another of Sophie's projects. Largely through her efforts, the county's clergymen have become acquainted with the district's Soil Stewardship activities, and her other planned Soil Stewardship Week activities also have brought results.

A former school teacher, Mrs. Ludwig believes there are many conservation lessons yet to be learned. Getting more women interested in the land and its care is one.

"I would like to see more women district directors, particularly in Pennsylvania," she says, "but it is even more important that the lady of the house know the values of conservation. Many good farm plans would have been put on the land sooner if she were better informed about the benefits of the plan. We've made some progress here, but there is a long way to go before conservation is a dinner table subject."

Sophie Ludwig devotes endless hours to district work, despite the fact she is a full-time employee of the Delaware River Joint Toll Bridge Commission and Treasurer of the County Extension Association, is active in many community projects, and helps run the Ludwigs' 70-acre fruit farm.

Conservation on the land on Allen Hess farm in Columbia County, Pa.—contour crop strips, farm pond and diversions, sod waterway, and other measures.

Note:—The author is assistant to the State conservationist, Soil Conservation Service, Harrisburg, Pa.

Minnesota Daughters of the Soil Mark Decade of Conservation Education

By Herbert A. Flueck

A DECADE of effective educational work in behalf of soil and water conservation is its own reward for a dedicated group of rural women known as "The Minnesota Daughters of the Soil."

This North Star State group, of which Mrs. Del Krenik of Madison Lake is the sixth president, was one of the earliest of similar organizations to be formed in a number of States. Working closely with soil and water conservation districts, it sponsors conservation activities ranging from high school speaking contests to plowing match beauty queens.

The Minnesota Daughters of the Soil was officially organized in 1952, following the pattern set by a group of soil conservation minded women in the Freeborn County Soil and Water Conservation District at Albert Lea.

The Daughters of the Soil recognized the need, however, for a more formal organization and in 1953 enlisted the help of Executive Secretary Matt A. Thorfinnson of the State Soil Conservation Committee in drawing up a constitution and bylaws. The Daughters also decided to affiliate with the Minnesota Association of Soil and Water Conservation Districts. This was a natural move, because the founding members were wives of the Association's directors.

Besides attending a number of directors' meetings and area and State association conventions, the ladies already had some experience in carrying out soil conservation work, as their husbands had asked them to take over the leadership of several district educational projects. It was their success in this activity that had led directly to their decision to organize the Minnesota Daughters of the Soil. Also as a result of these activities, the president of Daughters of the Soil now sits as an ex-officio member of the board of directors of the Minnesota Association.

Joyce Andreas of Montevideo, Minnesota's 1961 "Queen of the Furrow."

Minnesota Daughters of the Soil as hosts for 1962 NACD Auxiliary leaders at Minneapolis: Front row (l. to r.): Mrs. John Harmon (Mich.), Mrs. Alfred Stewart (Iowa), Daughters' President Krenik, and Mrs. Leroy Viehman (Wis.). Back row: Mrs. Archie McIntosh (Ill.), Mrs. Max Huss (Ind.), and Mrs Roman Henkels (Minn.).

Every year since its activation, the Daughters of the Soil has sponsored the "Minnesota Queen of the Furrow" contest. Each year, the queen has ruled over the Minnesota soil conservation field days and "Plowville" matches, beginning with 1952 when Plowville was the site of both the Minnesota State and the national plow matches attended by more than 100,000 people. In addition, the Daughters of the Soil sponsor all the official activities for women during the State Plowville matches.

As a beginning activity for its

Note:—The author is State conservationist, Soil Conservation Service, St. Paul, Minn.

second decade the organization is cosponsoring, with the State districts association, a public conservation speaking contest for junior and senior high school students. The topic, "Soil and Water Conservation—Will It Affect My Future?," will be the theme for speeches in soil and water conservation districts and State association area organizations throughout Minnesota. The Daughters obtained permission from the State Department of Education to work through the schools.

League of Women Voters Promotes Political Action For More Water Resource Conservation

By Mrs. Robert J. Phillips

PRESSURES put on our national resources by an expanding population led the League of Women Voters of the United States to decide in 1956 to work on conservation of water resources on a national basis.

Like an increasing number of citizens, League members had become alarmed over this situation. They wanted to learn the facts and to be prepared to take action on suggested remedies.

During the last 6 years, they have learned a great deal—not only about wise resource management but also about the political realities of achieving desired results. They have learned, for example, that choices have to be made among competitive uses, many of which are legitimate, attractive, and worthwhile in themselves, but which cannot all be accommodated.

Comprehensive development in which each specialized interest is considered and given its place in a reasonable, coordinated, cooperative program can be achieved only if there is deliberate, systematic, intelligent, imaginative planning and cooperation on all levels—local, State, regional, and Federal—and among all factions interested in soil, water, forest, and wildlife resources.

The increased and really contradictory demands—for increased production of our natural resources

Mrs. Robert J. Phillips.

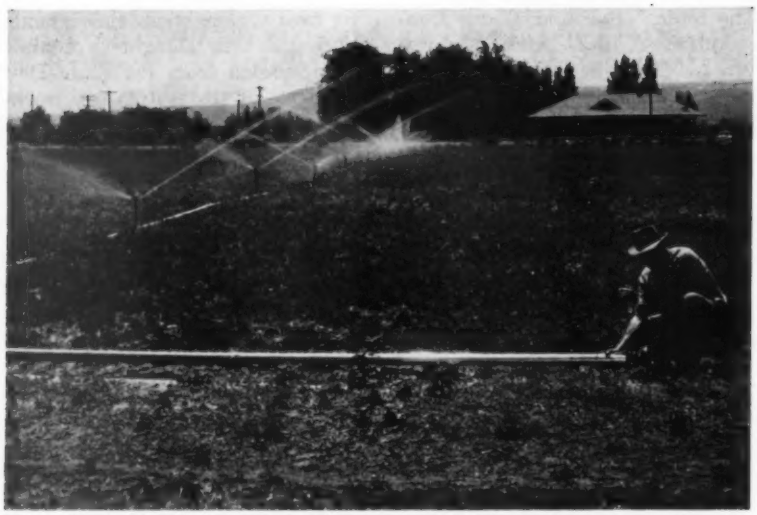
and at the same time for more areas preserved in their natural state or made inviting for recreation—make it imperative that there be a like increase among those who have a real concern for natural resources and who are willing and able to translate that concern into effective action.

Most political scientists seem agreed that people in a community who will take the trouble to learn about issues, vote in referenda, support candidates on the basis of their platforms, express themselves aloud on political issues—in other words, those most likely to take an interest in conservation measures—are members of citizens organizations or civic groups. Indeed, it is often through these organizations that the members become aware of and knowledgeable about community problems.

One way to enlist more citizens in active work for our soil, water, forests, and wildlife is, then, to bring more people into conservation-minded organizations such as the Soil Conservation District groups, the Izaak Walton League of America, the Garden Club of America, the 4-H Clubs, the Boy and Girl Scouts, the Future Farmers of America, and others.

Another way is to interest existing citizen organizations not now conservation minded in supporting conservation programs. Such civic groups can perform a most useful function in complementing the views of those with special conservation interests. For it is quite true that sometimes strong organizations devoted to one resource use seem more intent on checking some other worthwhile use of this resource than in forwarding a total conservation program. Here is where the disinterested citizen group can fit in. Laymen can listen to the conflicting view of the pressure groups and help to balance the special demands. They can do

Note:—The author is president, League of Women Voters of the United States, Saint Charles, Ill.



Water for irrigation is only one of many uses of this precious resource here in Benton County, Wash., in the Columbia Basin.

this, of course, only after they have learned the facts.

As members of the League set out to become informed in the field of water resources, they found a dearth of material in simple, usable form to give the citizen the background he needs for intelligent participation in political decisions. What the citizen needed was a combination of geographical facts, present and future human needs of all kinds, the governmental organization, and the solutions proposed.

So Leagues in various river basins set out to bring together their own materials. It might seem impossible for a group of women, all volunteers, none of whom were geographers or resource experts or professional writers, to compile a sound study of as big a river basin as the Columbia, for example, but they did. They published the result in "The Great River of the West." In short order two printings sold out. Leagues in other river basins did the same thing. Among the publications issued are those about the Delaware, the Red River (Minn. and N. Dak.), and, most recently, the Susquehanna basins. At the present time an inter-League group is at work on a study of the Ohio River basin.

Using a guide called "Know Your River Basin" League researchers looked for answers to questions like these:

What is your immediate watershed? Does local watershed management cover the many diverse local situations of soil, slope, cover, and climate? What are the basin's watershed problems: burned-over areas, grassland overgrazed, overlogging, soil erosion, sheet wash, gullying? How many farms are under soil and water conservation practices? Which soil conservation farm practices remain to be established: contour plowing, deferred grazing, land preparation, strip-cropping? How many farm ponds have been built? How many idle or marginal acres are planted to trees and wildlife protection areas? How many acres of woodland have improved management plans?

Also, what agencies are concerned: Soil Conservation Service, Forest Service, Soil Conservation Districts, State Forester, Agricultural Extension Service?

These river basin pamphlets have proved useful to many people outside the League, including experts on water resources and men and women in public life; because in them the Leagues have summarized stupendous amounts of materia and have shown the relationship between different programs and points of view.

Not every layman—not even every League member—can participate actively in such a study; but almost everyone can listen to the experts, do some reading, make a few go-and-see trips, and discuss these matters with others. Although we cannot devote ourselves to consideration of wise resource management as the experts can, we can help the experts with bits and pieces of our time and energy. And sometimes we can be the connecting link between the expert and the public and between the public and the decision makers.

The expert, the citizen, and the politician all need each other to translate theories, plans, and blueprints for action into functioning programs. In united association there can be strength.

◆

For the third consecutive year the Noble County Soil and Water Conservation District Auxiliary placed first at the 1962 Tulsa (Okla.) State Fair for "Outstanding Achievement in the Promotion of Soil Conservation." Judging was based on a scrapbook containing evidence of the year's work.

Each year, the Auxiliary sets up a "Plan of Activities," which is followed religiously.

Among the Auxiliary women's accomplishments for the past year were: Fellowship tea; poster, essay, and jingle contests for school children; equipping schools in the district with conservation materials; assisting with Soil Stewardship Week activities and a Conservation Fair; setting up a booth at the county fair; holding educational tours; and many other activities. Each year proves a challenge to them to include more in their plan of activities for promoting soil and water conservation.

S. C. District Clerk Does Conservation Homework

By Curtiss O. Steele

"BERNICE simply *lives* conservation—it's a day-to-day concern of hers." This statement could be attributed to most of the people who know Mrs. Carl Hunsinger, clerk for the Pickaway County Soil Conservation District at Pickaway, Ohio, since 1959.

Carl and Mrs. Hunsinger have been cooperators with the district since 1952. Practices they have applied in accordance with their basic conservation plan worked out with the help of the Soil Conservation Service for their once badly eroded 206-acre farm include a conservation cropping system, gully control, diversion terraces, tile drainage, water diversions and sod waterways, farm ponds (one for gully control), tree and hedgerow plantings, and wildlife area development.

Ingenuity and imagination have led Mrs. Hunsinger to conservation accomplishment beyond that ordinarily expected of cooperators. For example, she has used discarded baler twine successfully as a mulch on critically sloping areas to help in the establishment of fescue; because, she says, "the small, hairy threads fix themselves to the soil particles at strategic times." She and Carl also have hauled stone from the creek to provide riprap livestock crossings in other problem areas.

Forty cows make up the Hunsingers' milking herd. Most of their cropland is in meadow for hay and rotation pasture. A relatively low acreage of corn is produced, followed by enough small grain for reseeding the meadows.

Every morning before she goes to work, Bernice helps with the farm chores; and each evening finds her doing more outside chores before preparing supper.

Mrs. Hunsinger is most effective in enrolling new cooperators for the district. She "sells" conservation of natural resources with the enthusiasm of an evangelist. Whether it is at her desk, standing beside a gate in the Hunsinger barnyard, or out in a lush alfalfa-grass meadow, she is effective in telling her story. Thus she can describe the conservation soil survey for their farm with understanding. She explains how the soils are related to each other—how they must be handled for conservation farming.

Soil Stewardship Week is emphasized in all groups with which Bernice is associated, in her neighborhood and in the district. Her local church has a special Soil Stewardship service on Rogation Sunday, as a result of her influence.

The Hunsingers have one daughter, Joanna, a junior in the College of Home Economics at Ohio State University. As a high school freshman, Joanna won the Conservation Essay Contest sponsored by the district. The judges commented that the essay reflected an amazing comprehension of the science of soil and water conservation.

The Hunsingers feel that practicing soil conservation on their own farm is one means of "demonstrating where we are," and that soil and water conservation is urgent, and plain common sense.

"Our experience has been that nature is a cooperative force," Mrs. Hunsinger says. "We do not waste anything that might be turned back to the earth in some manner. Newspapers or discarded Christmas trees make excellent gully fill. Waste wood is burned in our fireplace and the ashes used around fruit trees or in the garden. Food wastes are incorporated into the garden, or fed to birds. No vegetative matter is ever burned, except for fuel.

"We believe that eternal vigilance in educating others, especially our youth—as someone has said, to capture their imagination—is a charge that we who know have. We believe in the words of Liberty Hyde Bailey who wrote: 'One does not act rightly toward one's fellows if one does not know how to act rightly toward the earth!' "

Mr. and Mrs. Hunsinger standing in well-protected diversion ditch channel. Beyond SCS work unit conservationist (on ditch ridge at right) is a wildlife area and pond.

Note:—The author is area conservationist, Soil Conservation Service, Columbus, Ohio.

The Defense Rests—Ladies Are Conservation Jury

By W. L. Heard

LADIES, you have heard the case presented. Soils *do* affect our health. Water *is* vital to life.

I know what people like you mean to a community. I have seen leaders like you organize to correct many problems. In some communities, you have united to provide fire protection for valuable woodlands. In others you have sponsored essay contests for school children. You have promoted the planting of unsightly eroded roadbanks with trees and grass. And you have spoken out vigorously for measures that make Mississippi a greener, more beautiful, and healthful place in which to rear our children.

Without your efforts the work of the conservationist is seriously handicapped.

Public opinion—leadership from the people—puts the vital spark of life in conservation. Consequently, I hope you will return to your home communities with understanding of Mississippi's needs in conservation—and with resolve to give of your talents to this cause.

I don't need to tell you people who have seen the gullies of north Mississippi that gullies can be healed. Nor do I need to tell you people of south Mississippi that diversified crops and proper land use can build a richer economy. Isn't it plain that we're going to have to farm these acres better—manage these resources carefully—and that this is a matter which affects each one of us wherever we live and whatever we do?

We, who are conservationists, attempt to evaluate our problems and determine what measures to apply. You, who are citizens, have the grave responsibility of determining policies through your votes—and through your action at community, State, and national levels.

You ladies from the Tupelo area know that Lee and Union County leaders recently voted to develop a number of dams in the Town Creek watershed for multiple-purposes—and they're discussing the possibility of attracting new industries into the area, and providing boating, fishing, hunting, and water skiing for these people who formerly had to go out of State for these sports.

These, then, are Mississippi's problems: Land that needs treatment; water that needs control and management for beneficial uses. What can you do—what can the public do—to be sure we're dealing wisely with our conservation problems?

You clubwomen, through your conservation programs—and many of you as landowners and operators—are conscious of good farming measures. Rotation of crops—striperopping—terracing—contour farming—these are not foreign terms to you.

As one conservationist has phrased it: "The voice of the future is heard only feebly over the din of the market place—and the public has a responsibility to speak on behalf of future citizens."

The public—and that is you—can speak for State action in the matter of soil and water conservation. The public—and that is

A Mississippi conservation land-use scene of contour tillage, terraces, and improved pastures.

Note:—Excerpts from talk by the State conservationist, Soil Conservation Service, Jackson, Miss., before the Women's Cabinet of Public Affairs at Jackson.

you—can explore resource problems on the local and State level—conduct discussion forums—and, through publicity programs and other means, recognize the work of individuals and groups in conservation. The public—and that is you—can ask that conservation courses be made a part of the education of every Mississippi teacher—and that every school child be taught these vital principles upon which his very future depends.

Because you are women—concerned deeply with the preservation of life—you have a unique opportunity to improve the health and vitality of your families—and of future generations—through promotion of conservation on the land.

QUEENS OF CONSERVATION

By Erland A. Loving

HOW can pretty girls help in the promotion of soil and water conservation? One answer comes from the commissioners of the Clinton County (Iowa) Soil Conservation District, which for the past 3 years has had the largest number of "Queen of Conservation" entrants in the State.

The county contest is sponsored jointly with the local Cooperative Association, and the sponsors call on the women to help make the contest a success. For example, the district clerk, Mrs. A. E. McIlvain, is responsible for contest arrangements. Women do the contacting—first with mothers of contestants and then the contestants themselves.

All girls who enter are honored at a banquet, and each is presented a gift and corsage. The identity of the two county winners is revealed at the 4-H Club Show, in which all the contestants also take a part.

How does all this help promote conservation? Through the contest, which has now become a tradition in the county, the commissioners have been able to explain their District program to people they had not been able to reach in the past.

Each contestant must present a 1-minute talk on conservation or cooperatives. The best source for this information is found on the contestant's farm and in the conservation practices her family has installed.

Then, too, the queens have many talents and interests that help them present their conservation message. Many of them have helped their fathers with contouring, building terraces, planting trees, and developing wildlife areas. In fact, one contestant has operated her father's bulldozer in building waterways!

The queens (l. to r.): Linda Cain, Delmar; Pattie Whalen, Clinton (1961 "Miss Iowa"); and Dorothy Reed, DeWitt.

Note:—The author is work unit conservationist, Soil Conservation Service, DeWitt, Iowa.

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Tomorrow's Women In Conservation

Linda and Administrator Williams with Girls Nation plaque.

Among tomorrow's potential women leaders in the Nation's soil and water conservation movement are several teenage girls who have served as "Administrator for a Day" of the Soil Conservation Service in the American Legion Auxiliary's annual "Girls Nation" program for stimulating the youngsters' understanding of governmental operations.

The 1962 one-day "replacement" for Administrator D. A. Williams was petite Linda Dianne Kurtz, Reno, Nev., high school senior. Linda sat briefly in the leather chair behind the administrator's big desk, met and conferred with more members of his staff than she could hope to remember, and rejoined the other Girls Nation delegates later in the day with an armful of bulletins and other soil and water conservation references.

"It was a pleasure to meet and talk with all the kind people in the various divisions of the Soil Conservation Service," Linda wrote Administrator Williams in a near-perfect hand attesting to her standing as an "A" honor roll student. "Their patience with their 'Director for a Day' was a rewarding climax to a wonderful week at Girls Nation."

"Since I have a daughter," the "real" SCS head wrote Linda, "I know the pride and joy your parents experience with the honors you receive. All of us here in the Soil Conservation Service are proud of you, too."

17th NACD Convention

Denver, Colo., will be host city to the 17th annual convention of the National Association of Soil and Water Conservation Districts February 3 to 7, 1963. A highlight of the meeting, expected to draw about 1,300 district supervisors, Ladies Auxiliary members, and others, will be Sunday's opening nondenominational inspirational session. Its theme will be "We turn our eyes to the future"—the same as that for the annual Soil Stewardship Week, sponsored by the NACD, to be observed nationally May 19 to 26.